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Letter to the Editor



COVID-19 vaccination prioritization for persons with severe mental illness

India with a population of approximately 1.39 billion and nearly inhabitant of one-fifth of the world population, vaccination of its whole citizens is undeniably going to be a humongous task. As demand exceeds the supply, COVID-19 vaccination needs to be phasic and target-based, with graded vaccination of prioritized groups in order. The World Health Organization (WHO), as well as several other organizations, endorse three universal ethical principles while prioritizing vaccine allocation- endorsing effective vaccine with less side effect profile, prioritizing vaccine to high-risk groups, and providing equal opportunity to less privileged groups (WHO, 2021).

Most of the health organizations have drafted their guidelines for optimum distribution of vaccination and recommended priority groups. To identify the priority group, the application of Multiple-criteria decision-making approach (MCDM) plays a vital and real role in choosing the best alternatives among others. The first work published based on this approach highlighted prioritizing vaccine allocation to critically ill individuals, the elderly, health care workers, and pregnant women (Hezam et al., 2021). Meanwhile, the advisory committee of WHO along with the panel of US National Academies of Sciences, Engineering, and Medicine (NASEM) recommended vaccination of high-risk groups and included health care workers, individuals with a comorbid medical condition, older people living in the crowded setting as first among priority group to get vaccinated (Dooling et al., 2020; World Health Organization, 2020). Similarly, the advisory committee of Centres for disease control and prevention (CDC) on vaccination recommended equitable allocation of COVID-19 vaccine with health care personals, individuals older than 75 years, high-risk medical conditions, and long-term care facility residents as priority group (Dooling et al., 2020). The government of India established National expert group on vaccine administration for COVID-19 (NEGVAC) committee currently recommended Health care workers, frontline workers, elderly above 60 years and individuals above 45 years with comorbidity as first preference group for vaccination. It further enlisted twenty comorbidities among people aged between 45–60 years who can also be eligible beneficiaries in the priority list (MOHFW, 2020). These strategic allocations are the need of the hour in the overlong, laborious battle against COVID-19 given that the initial results of the age-structured study based on mathematical modelling reported a greater relative reduction in deaths after prioritizing vaccine allocation among the elderly (> 60 years) in India (Foy et al., 2021). Are we missing a major high-risk group for vaccine prioritization here?

Persons with severe mental illness (PSMI) like Schizophrenia, Obsessive-compulsive disorder, Major depressive disorder, and Bipolar disorder, have 10–20 years of reduced life expectancy, two-three times higher mortality risk, and are at higher risk of having physical comorbidity such as Obesity, Hypertension, Diabetes, cardiovascular disease, etc. than the general population. These individuals are at increased risk of inadequately following COVID-19 appropriate behaviours during the acute exacerbation of their illness and also face more barriers while seeking medical attention. The risk factor associated with poor prognosis in them are a) socio-economic deprivation such as living in overcrowded settings or homelessness, institutionalization and confinement, b) challenges in accessing the constantly revising COVID-19 guidelines, c) stigmatization, discrimination, and negative attitudes towards severe mental illness will prevent the patients from efficient utilization of medical health services. A recent meta-analysis of 634338 COVID-19 patients from 16 studies suggested that PSMI are at heightened risk of morbidity and mortality from COVID-19, even after adjusting for confounding variables (Toubasi et al., 2021). Another analysis of the electronic database of 61 million adult patients across 50 places in the United States, reported 7.64 folds greater risk of contracting COVID-19 infection, and 8.5 % mortality rate in PSMI (Wang et al., 2021). The latest National Mental Health Survey estimated 7 % of the Indian population has PSMI. To put this into perspective, with 8.5 % death rate and 7 % prevalence of severe mental illness (SMI), approximately 8.2 millions of Indians with SMI will be at risk of death, if they contract COVID-19 infection. In an attempt to understand the covid-19 impact on mental health and suicide rate during the first sixteen months of the pandemic, the author has highlighted that the overall rate of suicide either remained stable or even declined and in contrast, the actual consistent finding of higher mortality in PSMI is attributed to the direct and indirect effect of COVID-19 (Tandon, 2021a). So preventing them from COVID-19 infection or vaccinating this group in priority will aid in decreasing the mortality. Mental health professionals across the globe should gradually redirect their central focus from the potential mental health effect of COVID-19 to a more substantial contribution in generating awareness about the need of prioritizing vaccination in this high-risk group and supplement with data to policymakers across the world (Tandon, 2021b).

As a parting note, “Mental illness” poses the double disadvantage of both acquiring and having a worse course of COVID-19 infection that can rise mortality rates alarmingly. Inaccessibility in vaccine

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prioritization for this high-risk population represents a barrier to equitable vaccine rollout for them. Careful consideration of the aforementioned risks and WHO's second and third universal ethical principles prompts prioritization of COVID-19 vaccine for PSMI. The immediate revision of NEGVAC guidelines guaranteeing early vaccination to this vulnerable group will be a virtuous strategy.

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Declaration of Competing Interest

The authors report no declarations of interest.

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